

19-7709



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RB T102137-111-103
Job Sheet 201267



DAS
21
9-08

Part No: RB T102137-111-103

Job Qty: 6 pcs

8 p - 9-08

Part Name: Strap



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/30/19

Job Tracking No:

Due Date: 10/28/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RB T102137-111 Rev B IPP Rev. A 19.06.21 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Waterjet - Omax - 1	6 pcs	10/28/19	10/28/19	0.17	0.60	Waterjet - Omax	ALA/19/10/19
120	NV5000 - 1 - B4B	6 pcs	10/28/19	10/28/19	1.00	6.00	NV5000 - 1 - B4B	ALA/19/10/19
							NV5000 - 2 - B4B	
130	QC 2	6 pcs	10/28/19	10/28/19	0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	
							QC 2 - 66	

19-10-12

19-10-12

PRIORITY

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				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
140	QC 8	6 pcs	10/28/19	0.00 0.00	QC 8 - 12
					QC 8 - 14
					QC 8 - 17
					QC 8 - 20
					QC 8 - 25
					QC 8 - 3
					QC 8 - 32
					QC 8 - 33
					QC 8 - 35
					QC 8 - 39
					QC 8 - 4
					QC 8 - 44
					QC 8 - 45
					QC 8 - 49
					QC 8 - 58
					QC 8 - 8
					QC 8 - 9
					QC 8 - 68
					QC 8 - 67
					QC 8 - 1 (A)
					QC 8 - 47
					QC 8 - 40
					QC 8 - 52
					QC 8 - 23
					QC 8 - 57
					QC 8 - 76
					QC 8 - 61
160	Outsource - 1 - Heat Treat	6 pcs	10/28/19		ATL002-VC 5
180	Packaging 2-1 - Receive - B4B	6 pcs	10/28/19	0.00 0.00	Packaging 2 - 1 - B4B
					Packaging 2 - 2 - B4B
					Packaging 2 - 3 - B4B
					Packaging 2 - 5 - B4B
					Packaging 2 - 4 - B4B
					Packaging 2 - 6 - B4B
					Packaging 2 - 7 - B4B
					Packaging 2 - 8 - B4B
					Packaging 2 - 9 - B4B
					Packaging 2 - 10 - B4B
					Packaging 2 - 11 - B4B
					Packaging 2 - 12 - B4B
					Packaging 2 - 13 - B4B
					Packaging 2 - 14 - B4B
					Packaging 2 - 15 - B4B
					Packaging 2 - 16 - B4B
					Packaging 2 - 17 - B4B
					Packaging 2 - 18 - B4B
					Packaging 2 - 19 - B4B
					Packaging 2 - 20 - B4B
					Packaging 2 - 21 - B4B
					Packaging 2 - 22 - B4B
					Packaging 2 - 23 - B4B
					Packaging 2 - 24 - B4B
					Packaging 2 - 25 - B4B

VHS 19/10/16

Rf2019-10-22

DP NOV 01 2019

DAS
23
9-89

				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
190 QC 6	6 pcs	10/28/19	0.00 0.00	QC 6 - 9	DAS
				QC 6 - 68	NOV 14 2019 68
				QC 6 - 61	9-89
				QC 6 - 40	
				QC 6 - 81	
200 Packaging 3-1 - Stock - B4B	6 pcs	10/28/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	MIL
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
210 QC 21 - SA	6 pcs	10/28/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 53	9-89

Part Op 100 - Waterjet 2 OMAX (Waterjet 2) 1-Cut Blank. Use program RB T102137-107-103 2-Deburr if necessary
 Descriptions: 120 - NV5000-1 (MORI SEIKI VERTICAL MACHINE #1) 1-Machine as per folio FB843 FOLIO REV: AA DWG
 REV: B 2-Deburr
 130 - (QC2- Inspect parts off machine FAI/FAIB)
 140 - (QC8- Inspect parts - second check)

160 - (Outsource process - Heat Treat) 1-Issue P/O; 44848 Heat treat RC 32-38 2-Bead blast 3-Material type; 4140 4-Certificate of Conformity is required
180 - (Receive & Inspect for Damage & Mat'l Certs)
190 - (QC6- All purchased or subcontracted products) ***NOTE*** Zinc plating to be done after load test at final assembly.
200 - (Identify as per dwg & Stock Location: _____)
210 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-1.250X11.000	AISI 4140 Steel Sheet/Plate	1.8000 ft (.3 ea)	100-Waterjet - Omax - 1	<u>S201996</u>

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Omax - 1	MT-4140-S-1.250X11.000	2	24	0

Part Specifications

Specifications could not be found.

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DART AEROSPACE LTD		Work Order:	201267
Description: STRAP		Part Number:	RB F102137-111-105
Inspection Dwg: RB F102137-111		Rev: B	Page 1 of 1

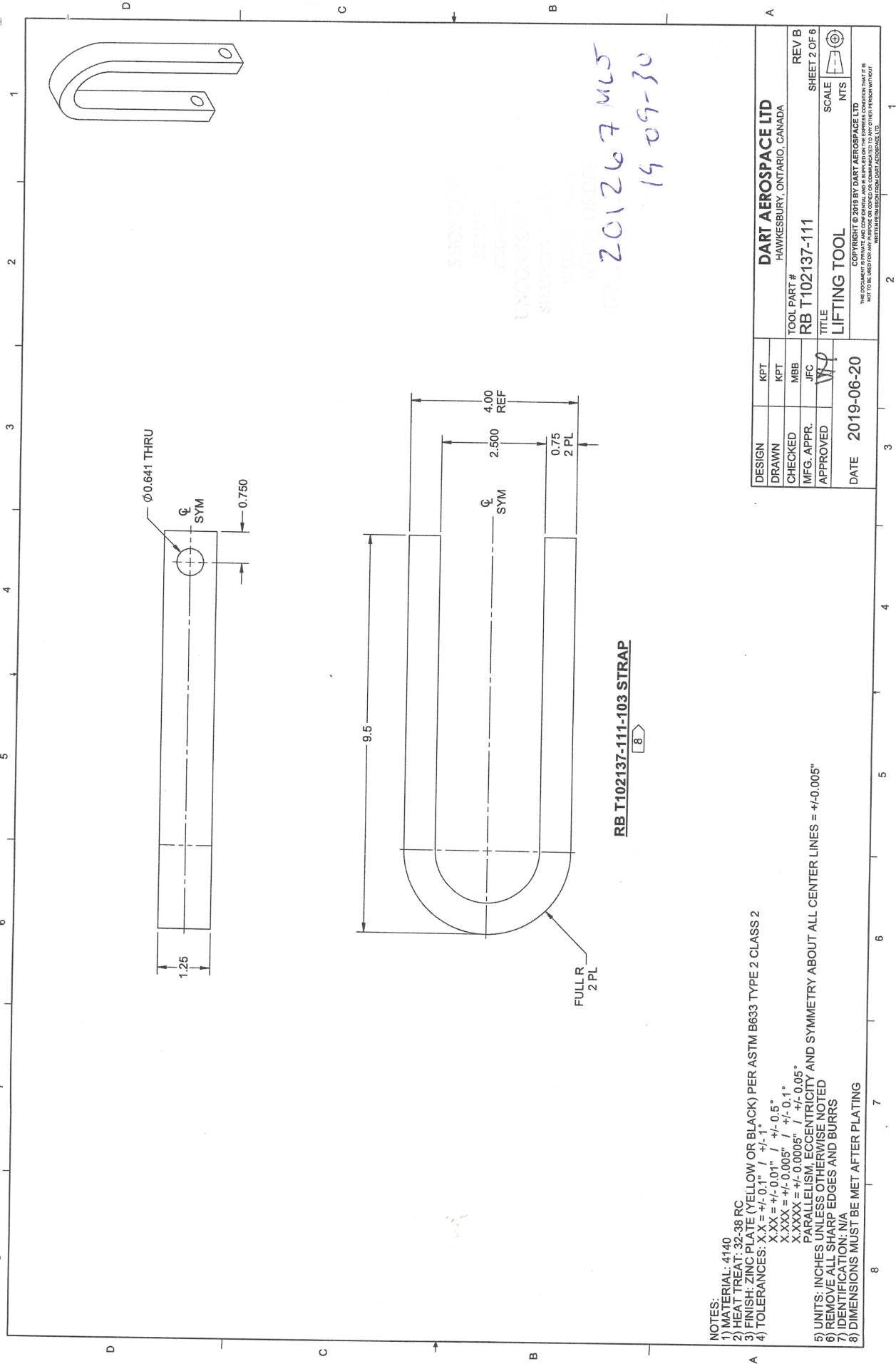
INSPECTION SHEET

[illegible]

Measured by: <i>ALA. Bmk</i>	Checked by: <i>VHS</i>	DAS	QC Inspector:
Date: <i>19-10-18</i>	Date: <i>19/10/16</i>	23 9.80	Date:

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	



- NOTES:
- 1) MATERIAL: 4140
 - 2) HEAT TREAT: 32-38 RC
 - 3) FINISH: ZINC PLATE (YELLOW OR BLACK) PER ASTM B633 TYPE 2 CLASS 2
 - 4) TOLERANCES: X.X = $\pm 0.1"$ / $\pm 0.1"$
X.XX = $\pm 0.01"$ / $\pm 0.05"$
X.XXX = $\pm 0.005"$ / $\pm 0.1"$
X.XXXX = $\pm 0.0005"$ / $\pm 0.05"$
 - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 6) REMOVE ALL SHARP EDGES AND BURRS
 - 7) IDENTIFICATION: N/A
 - 8) DIMENSIONS MUST BE MET AFTER PLATING



Dart Aerospace Ltd.
12 70 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044848



Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

Attention: Bejenaru, Livia

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044848

PO Date: 10/22/19

Due Date: 11/7/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED
2019-10-24

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	201481	RBE117-12020W16-1	RBE117-12020W16 Rev B	Frame 1-Issue P/O; RC 40-45 2-Bead blast 3-Material type; 4140 4-Apply LPS-3 to ALL steel parts 5-Certificate of Conformity is required	Firmed	-	11/7/19	6 pcs	0 pcs	6 pcs	\$52.3333/pcs	\$314.00
2	200889	PC250-500	PC250-500A Rev 1	Lock 1-Issue P/O; Heat treat RC 42-44 2-Bead blast 3-Apply LPS-3 rust inhibitor 4-Material type; O1 5-Certificate of Conformity is required	Firmed	-	11/7/19	3 pcs	0 pcs	3 pcs	\$104.6666/pcs	\$314.00



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PURCHASE ORDER

POHB044848



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	201267	RB T102137- 111-103	RB T102137-111 Rev B	Strap (Outsource process - Heat Treat) 1-Issue P/O; Heat treat RC 32- 38 2-Bead blast 3-Material type; 4140 4-Apply LPS-3 to ALL steel parts 5-Certificate of Conformity is required	Firmed	-	11/7/19	8 pcs	0 pcs	8 pcs	\$39.25/pcs	\$314.00
4	201988	20NR-84B	20NR-84B Rev 2	Spacer Dual Cage 4, 5/8" hole 1-Issue P/O; RC 33-37 2-Bead blast 3-Material type; 1045 4-Apply LPS-3 to ALL steel parts 5-Certificate of Conformity is required	Firmed	-	11/7/19	6 pcs	0 pcs	6 pcs	\$52.3333/pcs	\$314.00

Grand Total: \$1,256.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/24/19 10:02 AM Dart.Guerin.Kimberley

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ
ST-EUSTACHE, QC J7R 5A8
Tel: 450-473-1884 / Fax: 450-491-5498

Reçu de livraison

Delivery Receipt

BON DE TRAVAIL Order	EXPÉDITEUR Shipper ID	BON D'EXPÉDITION Shipper
340252	1	141116

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT /Customer 215

DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
Ph: 613-632-5200
Fax: 613-632-1053



LIVRÉ À / Shipped To

DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
Ph: 613-632-5200
Fax: 613-632-1053

COMMANDE DU CLIENT Customer PO	BON DE LIVRAISON DU CLIENT Customer Shipper No.	TYPE DE MATÉRIEL Material Type	DATE DE LA COMMANDE Order Date	TRANSPORTEUR Carrier
HB044848		4140	2019/10/23	CLIENT

QUANTITÉ Quantity	No. PIÈCE / Part No.	NOM DE LA PIÈCE / Part Name	DESCRIPTION DE LA PIÈCE Part Description	POIDS Weight
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8 RBT102137-111
(8) RBT102137-111 REV B
JOB 201267

44,

1 BC EPS

TYPE DE CONTENEUR Container Type	# DE CONTENEURS # Of Containers	COMMENTAIRES CONTENEUR Container Comments
BC EPS	1	

CERTIFICAT

EXPÉDIÉ PAR: Shipped by:	
-----------------------------	--

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 8

POIDS EXPÉDIÉ / Weight Shipped : 44,00

QUANTITÉ RESTANTE / Quantity Remaining : 0

POIDS RESTANT / Weight Remaining : 0,00

RECEIVED
NOV 01 2019
DART AEROSPACE LTD.

APPROUVE
[Signature]

CERTIFICAT

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 8

POIDS EXPÉDIÉ / Weight Shipped : 44,00

Signature:

Date:

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité

Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
340252	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
HB044848	N/A	4140		
SPECIFICATIONS DU PROCÉDÉ processing specifications				
SEL HARDEN				
HARDEN AND TEMPER				
EXIGENCE / requirement	SPÉCIFICATIONS / specified	TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results	
HARDNESS	32 - 38 HRC	8 (907)	36 - 38 HRC	
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
8	44	RBT102137-111 (8) RBT102137-111 REV B JOB 201267 1 BC EPS		

8 Nov

COMMENTAIRES / comments

APPROUVÉ par / Approved by:

Alexandre Demuyt



DATE: 2019-10-29

APPROUVÉ
gfg

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
340252	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
HB044848	N/A	4140		
SPÉCIFICATIONS DU PROCÉDÉ processing specifications				
SEL HARDEN				
HARDEN AND TEMPER				
EXIGENCE / requirement	SPÉCIFICATIONS / specified		TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	32 - 38 HRC		8 (907)	36 - 38 HRC DAS 68 9-89
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
8	44	RBT102137-111 (8) RBT102137-111-103 JOB 201267 1 BC EPS		

COMMENTAIRES / comments

SALT HARDEN 1550°F - 50 MINS
SNAP TEMPER 400°F - 2:00 HRS
TEMPER 975°F - 3:00 HRS
GLASS BEAD

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements. This document and any attached documents may contain confidential or proprietary information and may be subject to export control laws and regulations. If you are not the intended recipient, you are notified that any dissemination, copying of this e-mail and any attachments thereto or use of their contents by any means whatsoever is strictly prohibited. Unauthorized export or re-export is prohibited.

Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
340252	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.
Ce document et les documents qui lui sont joints peuvent contenir des informations confidentielles, être soumis aux réglementations relatives au contrôle des exportations ou ayant un caractère privé. S'ils ne vous sont pas destinés, nous vous signalons qu'il est strictement interdit de les divulguer, de les reproduire ou d'en utiliser de quelque manière que ce soit le contenu. Toute exportation ou réexportation non autorisée est interdite.

APPROUVÉ par / Approved by:

DATE: 2019-10-31

Lucie Desmarais
QA Technician



Entered:

Date:

JK Nov 18/19

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

19-7709

Route update only ☐

Job: <u>201267</u> Part No. <u>RB102 137-111-10</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐	
Date: <u>19-10-14</u>		Sequence #: <u>100</u>		QTY Affected: <u>8</u>	
Description Work Order Deviation <u>Material is 1.275" instead of 1.250"</u>		Disposition <u>USE AS IS</u>			
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☒ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Other/Details:			
		Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐		Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐	
		Completed By <u>J.C.L.</u> <u>19-10-14</u>		Lead hand / Supervisor <u>B.A. 19-10-15</u>	
		QC / QA Coordinator <u>68</u> <u>9-89</u>		OCT 16 2019	
		MRB (QS1042) <u>[Signature]</u>			